



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,997	09/29/2000	Ange Aznar	FR9-1999-0080 US1	2350
45503	7590	06/14/2005	EXAMINER	
DILLON & YUDELL LLP 8911 N. CAPITAL OF TEXAS HWY., SUITE 2110 AUSTIN, TX 78759			MURPHY, RHONDA L	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

CM

<b>Office Action Summary</b>	Application No. 09/676,997	Applicant(s) AZNAR ET AL.	
	Examiner Rhonda Murphy	Art Unit 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This communication is responsive to the amendment filed on February 7, 2005. Accordingly, claims 1-11 are currently pending in this application.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 and 6 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storr (US 6,633,543) in view of Shobatake (US 2003/0021279) and Yoshida (US 6,404,740).

**Regarding claims 1 and 9**, Storr teaches a method of setting up a path, through an ATM network (col. 3, lines 10-12), between an entry port (Fig. 1, trunk **141**) and an access point (network equipment **103**); duplicating all cells of incoming traffic entering through said entry port (col. 6, lines 51-53; multiple cells or all cells are capable of duplication); and transporting the duplicated cells along the path (col. 3, lines 42-45; col. 6, lines 34-38).

Storr fails to explicitly disclose marking the duplicated cells. However, Shobatake teaches tagging the duplicated cells (page 16, paragraph 0189; lines 7-16).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the system of Storr, by including Shobatake's method of tagging cells, since both teachings relate to ATM communication systems and cell tagging will indicate a connection to which the cell belongs (page 16, paragraph 0189).

In addition, Storr fails to explicitly disclose the access point as an observation point.

Yoshida teaches an observation point (Fig. 2, col. 13-18).

In view of this, it would have been obvious to one skilled in the art to modify Storr's system by incorporating an observation point, for the purpose of monitoring cells entering the network.

**Regarding claim 6**, Storr further teaches transmission of duplicate cells from the source, to each destination (col. 6, lines 51-53).

**Regarding claim 7**, Storr teaches duplicating cells transmitted over ATM switches. The process of duplicating the cells includes duplicating various types of cells.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to include cells such as unexpected cells, error cells, and nonconforming cells, which would enable an observation point to monitor all traffic entering the switches.

**Regarding claim 8**, the combined method of Storr and Shobatake teach transporting marked and duplicated cells in an ATM network. It is known in the art that cells are

Art Unit: 2667

marked for the purpose of uniquely identifying the cells. Thus, enabling the receiving switch nodes to recognize these distinct cells.

Cell headers provide source and destination information of each switch node and upon cell arrival, the switch node port tests whether the cell was properly transmitted to its intended destination. Thus, it is known in the art that tests are performed to determine whether the port of each switching node is included in the path to the observation point.

Additionally, it is known in the art and obvious to one skilled in the art that the cell will continue to travel along its intended path when each switching node port properly receives the cell. Thus, allowing continued transmission to the intended destination.

Furthermore, it is known in the art and obvious to one skilled in the art that the cell will discard and record an error when the cell is sent to an incorrect switching node. Thus, tracking erroneous transmissions and securing the networking by preventing receipt of unintended data.

2. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storr and Shobatake as applied to claim 1 above, and further in view of Palnati et al. (US 5,991,297).

**Regarding claim 2**, the combined method of Storr and Shobatake teach marking and duplicating cells in an ATM network.

Storr and Shobatake fail to teach reserving a bit within a cell.

However, Palnati teaches inserting a bit selection into the cell header for every multicast cell (col. 5, lines 62-65). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the method of Storr and Shobatake, by inserting a bit selection into the cell header, as taught by Palnati, for the purpose of distinguishing cells amongst duplicate cells.

**Regarding claim 3**, the combined method of Storr, Shobatake and Palnati teach reserving a bit within a cell header.

Storr, Shobatake and Palnati fail to explicitly disclose the cell header field as a generic flow control field.

However, it is known in the art and obvious to one skilled in the art that the generic flow control field is located within the header of a cell. Thus, Storr, Shobatake and Palnati method would be modified to utilize a bit in a cell's generic flow control field, in order to control the flow of ATM cells over the user-network interface (Storr, col. 4, lines 17-19).

**Regarding claim 4**, the combined method of Storr, Shobatake and Palnati teach reserving a bit within a cell header.

Storr, Shobatake and Palnati fail to explicitly disclose the cell header field as a most significant bit of a virtual channel identifier field.

However, it is known in the art and obvious to one skilled in the art that the virtual channel identifier field is located within the header of a cell and the most significant bit can be used. Thus, Storr, Shobatake and Palnati method would be modified to utilize a

bit in a cell's virtual channel identifier field, so as to identify the channel for routing the ATM cell through a network (Storr, col. 4, lines 19-21).

**Regarding claim 5**, the combined method of Storr and Shobatake teach marking and duplicating cells in an ATM network.

Storr and Shobatake fail to teach marking the duplicated cells with any combination of bits.

However, Palnati teaches unique combination of bits within a header of the cells (col. 6, lines 34-41). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the method of Storr and Shobatake, to include Palnati's teaching of unique bit combinations within a header, for the purpose of conforming to different implementations (col. 6, lines 40-41).

3. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Storr, Shobatake and Yoshida, in view of Delattre et al. (US 6,606,302).

**Regarding claim 10**, Storr teaches a cell switch fabric (Fig. 3, ATM switch fabric **302**) in each switching node (switch **300**); and line connections (lines between the switch fabric and switch ports) between the ports (switch ports **320** and **330**) and the switch fabric.

Although Storr teaches line connections between the switch fabric and the switch ports, Storr fails to explicitly disclose adaptive blades.

However, Delattre teaches adaptive blades (Fig. 1b, line cards 7) between the switch fabric and ports.

Art Unit: 2667

In view of this, it would have been obvious to one skilled in the art to modify the system of Storr, Shobatake and Yoshida, by including adaptive blades for the purpose of implementing access functions for managing ports.

**Regarding claim 11**, Storr teaches means for replicating cells.

Storr fails to explicitly disclose means within the cell switch fabric or within the adaptive blades for replicating cells.

However, Delattre teaches means within the cell switch fabric for replicating cells (col. 6, lines 4-6).

In view of this, it would have been obvious to one skilled in the art to modify the system of Storr, Shobatake and Yoshida, by duplicating cells within the switch fabric, in order to provide a copy of cells to be transmitted through the ATM network.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.



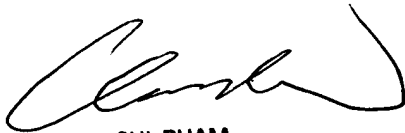
Art Unit: 2667

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy  
Examiner  
Art Unit 2667

rlm

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 6/10/05